

SG2 Programmable Relay Specifications

Power Supply Input

Terminal wire ranges acceptable by terminals.....	14-26 AWG
DC range	DC 24V==>20.4-28.8 V
DC power consumption	DC 24V(10/12point)==>90 mA
	DC 24V(20point)==>150 mA
AC range 100-240VAC.....	85-264 V
AC power consumption.....	90 mA

Environmental/General

Programming storage media	Flash
Execution speed	10ms/scan
Programming languages.....	Ladder, 200 rungs (7 cells/rung) Function Block: 99 blocks
Operating temperature	-20-55 Degrees C
Storage temperature.....	-40-70 Degrees C
Operating humidity.....	20-90% RH
Noise Immunity.....	ESD==>Contact±4K , Air discharge==>±8K
	EFT==>AC(power)±2K , DC(power)==>±1K
	CS==>0.15-80MHz , 10V/m
	RS==>80-1000MHz , 10V/m
Vibration	0.075mm amplitude/1.0g acceleration
Weight	10/12point==>230g
	Expansion Module ==>190g
	20point==>345g
Agency approvals	UL, CSA, IEC 61131-2
Mounting.....	Panel and 35mm DIN

Discrete Inputs

Wire size acceptable.....	14-26 AWG
High speed input frequency.....	1KHz
Standard Input frequency	< 40 Hz
Responding time.....	8 ms
Current consumption	DC24V==>3.2mA
	AC100-240V==>1.3mA
Active levels for ON versus OFF.....	DC24V ON==>over DC15V
	DC24V OFF==>under DC5V
	AC100-240V ON==>over AC79V
	AC100-240V OFF==>under AC40V
Input protection.....	Inverse Voltage Protect

Analog Inputs

Resolution.....	10 bit
Voltage range acceptable.....	Analog input==>DC0-10V; Normal input==>DC24V
Used as discrete input	YES, (<5V TURN OFF; >9.8V TURN ON)
Averaging function	4 value buffer
Short circuit protection?.....	YES
Total number available to be connected.....	8 (A1-A8)

Relay Outputs

Wire size acceptable.....	14-26 AWG
Contact material	Ag Alloy
Current rating (values at 24Vac, 24Vdc, 120Vac, 240Vac).....	8A Resistive, 4A Inductive
HP rating.....	120V 1/3HP; 250V 1/2HP
Maximum operating time	15ms(normal condition)
Life expectancy.....	10,000,000 operations
Maximum loading	8A – Resistive, 4A Inductive
Minimum load	16.7mA
Total number available to be connected.....	10/12point==>4 / 20point==>8

Transistor Output

Wire size acceptable.....	14-26 AWG
PWM maximum output frequency.....	0.5KHz (1ms on,1ms off)
Standard maximum output frequency.....	100Hz
Voltage specification.....	DC10-28.8V
Current capacity	1A
Maximum Loading	1A – Resistive, 0.3A Inductive
Minimum load	0.2mA
Total number available to be connected.....	10/12 point==>4/20point==>8

Timers

Maximum number	15
Timing ranges.....	0.01s - 9999min

Counters

Maximum number	15
Highest count.....	999,999
Resolution.....	1

Real Time Clock

Number available.....	15
Resolution.....	1min
Time span available (1/week/etc).....	week/year-month-day-hour-min

Analog Compares

Number available.....	15
Compare values.....	timer current value, counter current value, analog inputs



International Headquarters: 707 Dayton Road PO Box 1040 Ottawa, IL 61350 USA
815-433-5100 Fax 433-5104 www.bb-elec.com orders@bb-elec.com support@bb-elec.com

European Headquarters: Westlink Commercial Park Oranmore Co. Galway Ireland
+353 91 792444 Fax +353 91 792445 www.bb-europe.com orders@bb-europe.com support@bb-europe.com